



## Questions submitted during the OWTS Manual Public Outreach of September 26, 2018

### Petaluma Veteran's Memorial Building

#### Petaluma Specific

Q1. What is TMDL?

A: TMDL stands for total maximum daily load. Look at pair of rivers or streams, look at one component, river exceeds ability to deal with it, river impaired for that constituent. Go to source to get them to reduce that constituent.

Q2. Can you talk to any unique requirements in TMDL areas?

A: Sure, I'm assuming this is going to work similar because the Petaluma River is just starting their TMDL. They've written a draft. They're holding some meetings with agencies. They're going to be holding public meetings. I don't know the details of how they're proposing it's going to work. In the Russian River, it's further along. What they're proposing is increased standards. They're going to define an area—obviously, closer to the rivers, closer to the tributaries, that are more impactful than if you're 1000 feet away or a quarter-mile, something like that. So if you're within their high priority area, they're going to have additional standards, and they're calling it supplemental treatment or the different type of advanced dispersal systems.

Q3. How much benefit will come once these upgraded systems are installed (cost to benefit)?

A: With a standard system with a septic tank and leach field, you do get priority treatment in the septic tank, but the liquid fractions still contain nutrients and pathogens. And the soil, there's bacteria in the soil that would metabolize the nutrients and the pathogens and other viruses so the soil does do treatment for you. Regarding the cost benefit, when you start getting into the supplemental treatment units, there's something on your side, you don't have the right kind of soil, you don't have the right depth of soil, etc., maybe the groundwater's too close, maybe there's a clay layer too close to the surface, you can't use a standard system or have the naturally occurring soil do the treatment. So you start getting into the supplemental treatment units that mimic what the soil is doing. There's anaerobic...different types of treatment that are coming out and they're coming out with pretty innovative things for the units that are out there. I can't really answer this question about the cost benefit.

Q4. What assessment has been made to determine the homeless contribution to the waste issue?

A: Again, that's related to the TMDLs. They've identified them as a source. I don't know how they went about their assessment. I would reserve that for the Regional Water Board. (Unintelligible question asked.) The one for the Petaluma River is on the North Coast Regional Water Board's website. You'll have to dig around.



Q5. Are the tributaries of the Petaluma River determined by Sonoma County or by the State? State, the regional water board.

A: They are determined by the State Regional water

Q6. Have homeless encampments been considered as a primary source of human waste in the river?

A. Yes, they have. At least in the Russian River they've identified numerous sources and that was one of them.

Q7. What is the City of Petaluma doing to help the human waste in river problem?

A:

Q8. Please discuss the current nitrate problem in the West Petaluma area.

A:

Q9. Please address the Special Study area, Petaluma Nitrate, now a waiver prohibition area.

A:

Q10. Why are the severe restrictions still in place 40 years later after citing standards in the rest of the County have caught up with groundwater protection?

A.

Q11. How granular is the definition of Tributary to Petaluma River (i.e., seasonal water flows – roadside drainage ditches)?

A:

Q12. What is a "tributary" to the Petaluma River? Creeks? Drainages roads and ditches? Was there testing performed showing human waste?

A:

## **Composting Toilets**

Q13. Talk about composting toilets.

A: See Q14

Q14. Can you talk about the composting system?

A: We redrafted our sections on experimental and alternative systems. To me, a composting system is a type of experimental system. We have one instance in county currently that's operating, and that's at the Occidental Arts and Ecology Center. They came to us a couple years ago. Worked with Environmental Health. We worked with Regional Water Board. I think they have two or three different types of systems that they're piloting. We're still waiting for reports because they just recently got up and running with that system. So it is doable. It's currently a pilot program. It's one of the many types of experimental systems that can be brought to this county. What we're hoping for is more interest in these so that people will apply to be an experimental, be part of the pilot so we can get that program, if it works, moving through the system. And eventually one day the system will grow up to be an alternative system. It will be fully permitted throughout the county.

Q15. What would it take for the County to permit composting toilets that can be composted on-site without hauling it away?

A: One of our supervisors had the idea that a way to get composting toilets going quickly was to require that the solvents be hauled away. So we're considering that but the Occidental Arts and Ecology Center, their program is composting on-site and they're going to dispose of it on their site, typically 12" below the existing soil.

Q16. Could we look to examples of such systems in other states or countries?

A: I did look and was referred to Washington State and also talked to Oregon. They permit composting toilets. They have a requirement that the solids be disposed of 12 inches below grade. I asked what kind of volume, how many people are coming to you? They get about 30 a year in the whole state of Washington and Oregon. Why not more? Cons: Composting toilets only deal with the toilet. You still have kitchen, gray water. Don't get much of a reduction of traditional septic system by taking out toilets. They are not proven. Don't require monitoring data. Haven't studied it. There's literature but those states have not studied it so don't know environmental impact.

Q17. Could a gray water system with a composting toilet suffice rather than a septic system?

A: You would still need a septic system to handle the kitchen waste and effluent during the wet weather months would need to be diverted from the gray water system to a septic system.

Q18. Can you please speak / explain the compostable toilets and any requirements to use those for additions, grannies, etc.

A: Granny units are falling under ADU. Assuming have existing SFD, existing SS, and propose ADU, can reuse/utilize existing septic if have capacity to system, but must be code compliant and have capacity. In addition, septic tank asking for in front of ADU. That septic tank will deal with restroom waste but also the kitchen waste and liquefaction would go off to existing leach field. Regarding when this will go into effect, holding public meetings now and in October, will take comments into account, revise, get in from of BOS in November and submit to state. Can't guarantee how long state will have it. Approximate early to mid 2019.

Q19. What would be required to shift composting toilet systems from "conception" to experimental/alternative classification?

A: See A to Q14

Q20. Is it possible to model policies in other states (i.e. Oregon) or other nations (i.e. Canada, UK)?

A: We do and can consider the other policies, but must still comply with the States OWTS Policy.

### **Costs-Permitting**

Q21. Please address the costs homeowners will incur as a result of the new "replacement" system standards over past practices.

A:

Q22. Did you consider developing a set of replacement standards with cost to homeowners in mind?

A:

## Costs-Other

Q23. Why did the financing for AB 885.2000 go away?

A:

Q24. Why did the financial aid indicated in the initial legislation go away?

A:

Q25. Are there annual or regular inspections required? Costs?

A: Once your septic permit is finalized, there are not additional inspections unless you have a non-standard system. In which case there are routine inspections of your system and the cost varies from \$ to \$ annually.

Q26. What will the monitoring fee be per visit? Per year?

A: See A25

Q27. What if my property already is assessed a fee and a monitoring form filed twice a year? We have a pressure system, non-mound, non-drip.

A: In OPR program. Non-standard system. Pays a fee. Fills out monitoring data twice a year. We come out unannounced apparently to do inspection, would hope we do call in advance but that doesn't always happen. We have an easement on record. There just to look at septic system. No, it's not going to change. A nonstandard system is generally going to be above and beyond a standard system and is adequately treating the waste. They're relatively young. I think that would satisfy the regional water board if you're in their TMDL area so I don't think anything would change for you.

State allows nonstandard in our county based on monitoring and performance that they're going to continue to perform and function. Since you don't have a standard system soil to treat the effluage, there has to be ongoing monitoring to ensure maintenance being done on the system.

Q28. If you opt for an experimental system and it fails, do you get your money back?

A: There is a risk involved. The minimum criteria to be in the experimental program, it has to have a certification from the National Sanitation Federation and they make sure of all kinds of stuff and then it gets put out in the field and we evaluate it for a couple years. So there's these experimental systems—hopefully they're being used somewhere else so we can look at that data, but at a certain level, it's a risk. Once it's proven and it works, you're fine. If it fails, the landowner is responsible, unless there was a defect in how it was put in and then the responsibility could fall on whoever put it in. But it is the landowner's responsibility to treat their waste. A lot of you have seen mound systems and that was an experimental system, so there are good experimental systems. But we do want to be careful when we allow people to come in so we do have a review process.

Q29. In dealing with the government, this all sounds very expensive. Can you tell us prices for all these studies and permits?

A: Permit fees, yes we could. We didn't bring our fee sheet but, roughly, we can go over that. I think more to the point, one thing I thought about doing but didn't get around to doing was getting cost estimates. So if you needed a septic tank, how much would that cost? I think we have some consultants in the room. If I misspeak, please feel free to say "no, you're way off". A septic tank I think is around \$10,000 to 15,000 to install. A standard system, septic tank/leachline is probably \$15,000 to 20,000. When you start getting into a mound system, that's in the \$40,000 to 50,000 range. If you're talking a supplemental treatment above ground system with disinfection, that's probably \$60,000 to 70,000. Permit fees range \$1,300 to 1,500 depending on the type of system for plan review and inspection. The experimental system is a different fee. There's more of a fee involved because there's ongoing monitoring, plus the proponent is sending in monitoring reports that we're reviewing as well and that's extended over a different period of time. This requires an initial deposit of \$1,000 and then we set up an at-cost account.

## General

Q30. How long do the annual inspections go on by County for non-standard or drip (mound in particular)? Is it every year forever?

A: Yes.

Q31. Do existing septic systems require permits, or only if repaired or replaced?

A: If existing functional system, don't require additional permits. If you're doing a repair, a lot of work is exempt, but a repair permit would be for over 25% of a leach line, replacing a leach line in same trench.

Q32. Are these annual permits?

A: No one-time construction permits. With caveat for nonstandard systems when we have an easement on it.

Q33. What about existing septic systems on properties in a flood plain?

A: We are not differentiating existing systems in the flood plain from others.

Q34. What is the process for putting in a new septic tank?

A: The permitting process includes a complete application meeting all requirements in the OWTS manual, including setbacks, pay fees, and required inspections.

Q35. Who is the person I can speak with at Permit Sonoma regarding a new system?

A: Well and Septic Supervisor, Darla Pimlott.

Q36. Does the County consider the effect on visual aesthetics of "approved systems" (i.e., mounds on rural lots)?

A: This is not part of our regulations.

Q37. Why is there no flexibility in bedroom conversions (i.e., to office, etc.) when a system is certified?

A: We do allow bedroom swaps and modifications with appropriate documentation and plans.

Q38. I live in Southwest Santa Rosa within city limits but they have not brought sanitary sewer down our street, although across the street in County area they have sanitary sewer lines. Is there any ETA for sanitary sewer lines in our area of the City?

A: If you are in the City's jurisdiction, they will need to answer this question.

Q39. Given that low-flow devices are required in new construction, why have design flow not been reduced?

A: They have been reduced from the standard 150 gpd to 120 gpd.

Q40. On building permits and septic review

- 1) Defining "square foot increase" Is it flow increase, added bedroom, or more square feet?
- 2) What is the process for "Elevate Septic Areas"?

A: Square foot increase is non-bedroom habitable space. Flow increase is the result of adding a bedroom. In commercial systems the flow increase is determined by the population generated.

Q41. How many occupants are allowed per bedroom? Design standards are based on 2 people per bedroom, but this is not our area to enforce. With the new restrictions? No change

A:

Q42. I have a mound system rated at 450 gpd for a 4 bedroom home. We built a 3 bedroom home on 2 acres and have never gone above 250 gpd. We want to build an ADU (1 bedroom) on the property-what do the new regulations mean for adding the ADU?

A: It appears that your system has the capacity for the additional bedroom, an additional tank would be required and depending upon the age of your system, we may require a performance evaluation.

Q43. I own a house that is 25 years old. In the future I will need to replace or add leach lines. Will I be able to expand or repair my existing system without redesign?

A: 25% threshold as repair. Exceed that, have to get permit, look at soils, etc.

Q44. Who can report failing systems?

A: Anyone can report

Q45. If your property is sold, is it required to upgrade your system?

A: No

Q46. Do you have a list of Civil Engineers that are acceptable / recommended?

A: We have some at our office but the trap that we fall into is that it becomes dated, new engineers move into the area, some move out, some retire. It can't be 100% complete. People view it as a quasi-recommendation, but we do have a list.

Q47. If my system is old and functioning, how does this affect me?

A: Authority only extends when come in for building permit or failing system reported, or alternative system and we have easement agreement with you. State is different matter. Water quality control act. State has authority to request or require you tell them how you're disposing of your waste. If

they suspect substandard system, they'll require you upgrade. Only operating under TMDL if you're within their boundary. State will send out letters to homeowners asking what kind of system exists and then go from there. Distinction between county and state authority. Will be up to the regional water board to draw the line on scope of their TMDL.

Q48. Can a replacement leach field be installed in the same area as the existing system?

A: I would say it depends on the spacing. If you have existing leach lines 10' across, yes you can if there's space and if it's a replacement system. That's what we're looking at hiring a consultant to do that work.

Q: So you're still going to have to run a perc test?

A: Yes. We would want soils evaluated. Are charts and literature regarding percolation rates. Some run own perc tests. We'll take either one. Don't necessarily have to do perc test but need to look at soils. Don't require ground water on sites more than 5% slope.

Q: Expansion field was approved by county, will we have to go back and have soils engineer approve again?

A: Depends. Will pull records and see what they evaluated. Some designers back then were better than others. 30 years ago, couldn't have any failing perc test holes in the area as expansion field but had to have perc test done.

Q: System has failed now so if you went between the 10' rows, that's conceivable you could do that but that requires Soils Engineer. So if you go to expansion area, do you have to have a Soils Engineer?

A: Yes, but there's a difference between Soils Engineer and Civil Engineer. A Civil Engineer can evaluate soils but Soils Engineer not required. There may be sufficient info per the reserve area to allow that to be there if they did that 30 years ago. If it was evaluated, we'd take a look at what is on file, what was evaluated, and whether it meets current standards.

Q49. Are manufactured wetlands permitted under the experimental methods?

A: We currently do not have any manufactured wetlands in our experimental program and any above ground dispersal would be regulated by the Regional Water Board.

Q50. If system is not documented in County records, and I want to remodel, how do these regulations affect me?

A: A findings report would be required to document your system.

Q51. Doesn't the Business & Professions Code allow a General Engineering contractor to design and install a septic system?

A:

Q52. Why is there no distinction in how a large parcel not near a waterway is treated vs. a small heavily used parcel near a waterway? I feel they should be treated differently.

A: The County treats them all the same except for when the TMDLs come out and the regional water board requires a supplemental treatment closer to the river, we would have to honor that when you come in for a septic upgrade. But a large parcel outside TMDL area not treated the same as someone near or adjacent to river. Being driven by regional water board.

Q53. Why the County's requirements are more stringent than the State's regarding the use of a contractor vs. an Engineer? Of course the Engineers want it to be them, but it more than doubles the cost.

A: There are two different things at play here. State OWTS policy points to these professionals that they can do this work, does leave it up to the discretion of local jurisdiction but other state law board of registration for professional engineers, competent agency oversees specialists and they deem this to be solely within their jurisdiction and require these professionals do this work. Permit Sonoma has mechanical and electrical contractors that come in and can design and install if they do the work as a one-stop shop. That exemption from civil engineering is embodied in the state law. They have an exemption from being a civil engineer if they do the design and installation. Exemption for septic contractor not in there. Even though we're maybe more restricted than the state's OWTS policy, consistent with state law in this respect. As a regulator and reporting to BOS, not going to propose something contrary to state law and allowing contractors to design something they don't have authority to do, not going to do that.

Q: Why do you want a civil to do the design work?

A: Board of registration confirmed a civil should, is qualified.

Q54. PRMD told me 14-16 weeks to get a simple repair permit. By then we will be in the rainy season. PRMD is too slow and expensive. How can we fix the broken PRMD?

A: There are some process improvements we're working on now.

Q55. If you have an existing system that is functioning properly, and have a recent positive test result, want to add a bedroom, can you supplement a gray water system in lieu of replacing the septic system?

A: If you wish to add a bedroom, your system must be code-compliant and have the capacity to accommodate the additional bedroom.

Q56. If an existing leach line needs repair, will the County evaluate the entire system, re.: compliance before issuing permit? E.g. location of existing system may not meet current set back rules.

A: The system should be evaluated by a qualified consultant who can determine what repairs need to be performed while identifying the variances that may be applied.

Q57. Referring to the workflow sheet, "Existing Septic", "Is there an existing septic system on the property?" Who does this? A septic findings report? What does this cost?

A: If there are no records for the system a findings report is required. Costs vary and you would need to research this.

Q58. My real world experience is that every project requires a permit. There is no process to contest if a permit and septic review is required. Explain the process to contest a “required” inspection.

A: If you pick up one of our flow charts about the permitting process, a lot of \_\_\_ another set where we require a repair permit versus a replacement permit. There is work you don’t need a permit for. If you pull a permit and constructing something, we require inspections. Patrick Mullin can answer questions about required inspections, permitting processes. Who’s telling you need a permit and for what?

R: Water tank. I put a new roof on the water tank. Someone called the county to say that was unpermitted work and the county came out, and turned out water tank not in code.

A: A lot of the improvements we’re trying to make are going to remove a lot of the stumbling blocks for people getting building permits. Less triggers for that kind of stuff.

Q59. Question about operational monitoring.

A: If you have an experimental system, we enroll you in the OPR program. We charge an annual fee to go inspect it, and the fee ranges from roughly \$150 to 400. As we go out there and as you maintain and operate it, we look at the performance of the system, how well you’re maintaining it, the records that you’re keeping. The fee starts at \$400 and comes down over time. The fee relates to inspecting every one year, two years, or three years, and goes from \$400 down to \$150 a year.

Q60. Question about physically installing a new leach line. If you have an existing system and the leach line fails, you have to go through the repair process... And will that mean the County can come on your property and check it?

A: It depends on the linear footage. We wrote in that if you are replacing up to 25% of your existing system, it’s just a repair. If you go over threshold, it becomes a “replacement” under the new State’s OWTS policy and that goes into effect once we adopt this thing. Whether the County can come out and check it relates to the type of system. What you’re describing, the leach line is a component of a standard system.

Q61. Can PRMD make a simple sheet or new chart showing what install work a homeowner can do? Can I install a Stamped Standard System? An engineered mound?

A: See Table xxx of the OWTS Manual.

**Comment.** If a proper soil analysis has been completed by a soil scientist who is licensed, then the design consists merely of picking a dispersal rate/area from a chart for a standard trench system. A licensed contractor can do this. Only allowing Civil Engineers to do this exceedingly simple process of checking a box and doing some division is regulatory capture, a cash grab for Civils, will put locals out of business and result in increased costs and delays to the installation of these systems.

**Comment.** Nathan said the County doesn’t need to reinvent the wheel on every experimental system, yet PRMD is forcing costly and slow monitoring on the compost toilet project even though there are hundreds of thousands of such systems nationwide. Either say exactly what the proof of function is needed to a system “alternative”, or don’t say that the County doesn’t need to reinvent. We are reinventing everything.

**Comment.** Bring back the reutilization policy.

Let countywide waive from W.O. to not require groundwater determination on repairs and with possible upgrade.

